Colloids and Surfaces A: Physicochemical and Engineering Aspects, 74 (1993) 318–319
Elsevier Science Publishers B.V., Amsterdam

Contents

Vol. 74 No. 1

Special Issue: The Colloid Chemistry of Silica. A collection of papers presented at the Ralph K. Iler Memorial Symposium on the Colloid Chemistry of Silica, held at the 200th National Meeting of the American Chemical Society, Washington, DC, 26–30 August 1990

Preface vii
The chemical kinetics of silicate sol–gels: functional group kinetics of tetraethoxysilane
R.A. Assink and B.D. Kay (Albuquerque, NM, USA) 1
The preparation and growth of colloidal particles of concentrated silica sols
H. Liu, J. Wang, Y. Mao and R. Chen (Nanjing, People's Republic of China) 7
Preparation and characterization of silica-modified activated carbon fibers
A. Matsumoto, M. Ruike, T. Suzuki and K. Kaneko (Chiba, Japan) 15
Structure and energetics of silica in the sol–gel to ceramic transitions
J.Y. Ying and J.B. Benziger (Princeton, NJ, USA) 23
Infrared reflectance spectroscopy of porous silicas
T.A. Guiton and C.G. Pantano (University Park, PA, USA) 33
Microporous silica microballoons
K. Kaneko (Chiba, Japan), H. Isobe (Funabashi, Japan), T. Katori, I. Tokunaga, T. Gouda, T. Suzuki and S. Ozeki (Chiba, Japan) and K. Okuda (Funabashi, Japan) 47
Particle size distribution and determination of characteristic properties of colloidal bismuth–silica compounds by small-angle X-ray scattering and inelastic light scattering
H.H. Paradies (Iserlohn, Germany) 57
Surface characterization of amorphous silica — a review of work from the former USSR
L.T. Zhuravlev (Moscow, Russian Federation) 71
Reactive silica — a new concept of the structure of active sites
V.A. Radzig (Moscow, Russian Federation) 91
Inhibition of silica–silicate deposit in industrial waters
J.S. Gill (Pittsburgh, PA, USA) 101
The adsorption of proteins in fermented aqueous food by silica gels
M. Ito, K. Yamauchi and K. Matsuzawa (Miyazaki, Japan) 107
Influence of silica properties on performance of antifoams in pulp and paper applications. 2. In-situ hydrophobing
R.E. Patterson (Conshohocken, PA, USA) 115

Abstracts 127

Vol. 74 Nos. 2/3

Reviews
Physical aspects of detergency
B.J. Carroll (Bebington, UK) 131
Solubilization–emulsification mechanisms of detergency
C.A. Miller and K.H. Raney (Houston, TX, USA) 169

Quantitative measurements of amino silylation on plasma-activated mica surface
C.-G. Gölander (Uppsala, Sweden) and E. Kiss (Budapest, Hungary) 217
Polarized electric light scattering study of interactions in α-FeOOH suspensions
V. Peikov and I. Petkanchin (Sofia, Bulgaria) 223

Quasi-static shape of the steady moving meniscus — comparison of the apparent and extrapolated dynamic contact angles
J.G. Petrov and R.V. Sedev (Sofia, Bulgaria) 233
Characterization of the interface in carbon-fibre reinforced composites by transmission electron microscopy
E. Klinklin and M. Guigon (Compiègne, France) 243
Perfluoropolyether microemulsions: conductivity behaviour of four-component water-in-oil systems
A. Chittofrati and M. Visca (Milan, Italy) and N. Kallay (Zagreb, Croatia) 251
Mass transfer of surfactants and hydrodynamic interactions at small separations in emulsion systems. 1. Scaling concepts
E. Mileva and B. Radoev (Sofia, Bulgaria) 259
Mass transfer of surfactants and hydrodynamic interaction at small separations in emulsion systems. 2. Potential theory
E. Mileva and L. Nikolov (Sofia, Bulgaria) 267
Surface reactions on hydroxyapatite in the presence of fluoride ions. 1. Saturated and congruent conditions
P. Gasser, J.C. Voegel and Ph. Gramain (Strasbourg, France) 275
The critical micelle concentration of Teric X10 by the small rod-in-free-surface method of surface tension measurement
C.J. Lyons, B.P. Moore, C.D. Distel, E. Elbing, B.A.W. Coller and I.R. Wilson (Clayton, Vic., Australia)..... 287
Water-in-crude oil emulsions from the Norwegian continental shelf. 8. Surfactant and macromolecular destabilization
O. Urdahl, A.E. Møvik, and J. Sjöblom (Bergen, Norway)..... 293
Asphalt emulsions: flocculation induced by a cationic surfactant and application to size partitioning
F. Leal Calderon, J. Biais and J. Bibette (Pessac, France) 303

Brief Note
Selective flocculation of coarse particles
B.M. Moudgil, S. Behl and T.S. Prakash (Gainseville, FL, USA) 311

Book Review 313
Author Index 315
Subject Index 316
Contents (Vol. 74) 318